

## REMARKS

The Office Action dated March 24, 1997 has been carefully reviewed. In response thereto, claims 2-43 have been amended. No new matter is added by the claim amendments.

In paragraph 14 of the Office Action, claims 2-43 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regard as the invention. Applicants respectfully submit that this rejection is overcome by this response. The Office Action states that the "examiner is not certain that the meets [sic] and bounds of these claims can be determined because of the language in the disclosure and claims." The Office Action further states that "[a]pplicants are being requested to reference the claim limitations in this application to the disclosure so that the meets [sic] and bounds of these claims can be properly considered." Applicants respectfully submit they are under no duty to prospectively reference claim limitations to the specification where the Examiner has not specifically identified what is objected to as indefinite. MPEP § 2111 states that "[d]uring patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.'" Also, it is only "when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language." MPEP § 2111.01. Applicants respectfully request that this blanket rejection for indefiniteness be withdrawn.

However, in order to advance the prosecution of the present application, Applicants shall provide a summary of the pertinent disclosure including references to examples supporting the claimed subject matter. Applicants shall provide citations to

the '81 case supporting the pending claims, as well as a cross-reference to corresponding sections of the '87 specification (see footnotes *infra*). The present application asserts priority to the disclosure of the '81 case, filed on November 3, 1981, as Ser. No. 317,510, and issued September 15, 1987, as U.S. Pat. No. 4,694,490. The disclosure of the '81 case is generally addressed to apparatus and methods for automatically controlling the transmission and presentation of information programming, including the application of embedded signalling for a number of functions, including the control over decryption and access, monitoring of usage/availability, control of external equipment, coordination of multiple broadcasts, automated compilation and collection of billing data, and generation and presentation of combined media presentations of broadcast and locally-generated user specific content. (U.S. Pat. No. 4,694,490, Abstract; col. 3 line 29 to col. 5 line 27). The priority disclosure further discusses coordination and control of programming at several levels of the communications chain, including transmission stations, intermediate transmission stations, and receiver stations.

Regarding the present application, the claims are generally directed to methods of gathering information at a receiver station, communicating subscriber station information from subscriber station to a remote collection station, signal processing at a receiver station, and encoding signals to control a presentation. Claims 2, 25 and 29 are generally directed to signal processing (See, e.g., U.S. Pat. No. 4,694,490, col 19, line 5 through col. 20 line 10, col 15 line 26 through col. 17 line 33 -- see also col. 14 line 33

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through col. 15 line 25 and col. 21 line 20, through col. 22 line 4)<sup>1</sup>. Claim 13 is directed to a multimedia receiving apparatus (See, e.g., U.S. Pat. No. 4,694,490, col 6 line 22 through col 9, line 25, col 19, line 5 through col. 20 line 10, col 15 line 26 through col. 17 line 33 -- see also col. 14 line 33 through col. 15 line 25 and col. 21 line 20, through col. 22 line 4)<sup>2</sup>.

Claim 21 refers to a method of communicating subscriber station information (See, e.g., U.S. Pat. No. 4,694,490, col 19, line 5 through col. 20 line 10, col 15 line 26 through col. 17 line 33 -- see also col. 14 line 33 through col. 15 line 25 and col. 21 line 20, through col. 22 line 4, col 20, lines 16 through 68)<sup>3</sup>. Claim 26 refers to a method of controlling a remote intermediate transmitter station information (See, e.g., U.S. Pat. No. 4,694,490, col 19, line 5 through col. 20 line 10, col 15 line 26 through col. 17 line 33 -- see also col. 14 line 33 through col. 15 line 25 and col. 21 line 20, through col. 22 line 4, col 20, lines 16 through 68, Col. 10, line 14 through col 12, line 67)<sup>4</sup>. Claim 31 refers to a method of generating and encoding signals to control a presentation (See, e.g., U.S. Pat. No. 4,694,490, col 19, line 5 through col. 20 line 10, col 15 line 26 through col. 17 line 33 -- see also col. 14 line 33 through col. 15 line 25 and col. 21 line 20, through col. 22 line 4 -- see especially col 19, lines 23-27, and paragraph beginning at col 4, line 5 and col 11 lines 57-65)<sup>5</sup>.

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<sup>1</sup> See corresponding pages in 1987 specification: pages 447-457, 19-28, 288-312,86-93, 162-193, 197-246, 272-278,312-324

<sup>2</sup> Corresponding pages in '87 Spec: pages 19-40

<sup>3</sup> See corresponding pages in 1987 specification: pages 447-457, 19-28, 288-312,86-93, 162-193, 197-246, 272-278,312-324, pages 469-478

<sup>4</sup> See corresponding pages in 1987 specification: pages 447-457, 19-28, 288-312,86-93, 162-193, 197-246, 272-278,312-324, pages 469-478, pages 324-390

<sup>5</sup> See corresponding pages in 1987 specification: pages 447-457, 19-28, 288-312,86-93, 162-193, 197-246, 272-278,312-324

Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter. Applicants will provide additional specification support in their detailed response to the Examiner's specific rejections provided *infra* in section B(2).

### **NON PRIOR ART REJECTIONS**

In paragraph 15 of the Office Action, Claim 13 is objected to because "an control signal" is grammatically incorrect. Claim 13 has been amended to correct this deficiency.

Claims 2, and by virtue of their dependence on claim 2, claims 3-12, and 18 are rejected in paragraph 15 of the Office Action under 35 U.S.C. ' 112 as being indefinite. Specifically, the Examiner asserts that in line 6, "said step of identifying" lacks antecedent basis. Claim 2 has been amended to correct this deficiency and correspondingly, Applicants respectfully submit that the rejection of dependent claims 3-12, and 18 is overcome as a result.

### **PRIOR ART REJECTIONS**

In paragraph 16 of the office action claims 2-4, 13 and 14-19 are rejected 35 U.S.C. §102 (e) as being anticipated by Campbell (U.S.P. 4,536,391). Applicants respectfully disagree with this assertion and traverse this rejection as follows.

U.S. Patent No. 4,536,791 to Campell et al. relates to addressable cable television control systems with video format data transmission. Campbell discloses an addressable cable television control system that controls a television program and data signal transmission from a central station to a plurality of remote user stations. Campbell's data signals include both control and text signals in video line format which are inserted on the vertical interval of the television signals. An intelligent converter at each remote user location uses the data signals to control access to the system on the basis of channel, tier of service, special event and program subject matter. The converter includes apparatus for interfacing with a two-way interactive data acquisition and control system.

Campbell teaches a head end station that includes a central data system utilizing a control computer which gathers data from a wide variety of sources and formats the data for transmission on video frequency channels. The formatted data is then transmitted by communication link to a television program processor where it is incorporated into the vertical blanking intervals of video signals by a variety of television program sources. The head end unit then transmits the combined cable television and data signal to remote subscribers. Normally, the signals are then transmitted through a cable network to a plurality of subscribers. The signals are received by an addressable converter which then processes the data on line as determined by subscriber input for desired viewing on one or more television sets.

In contrast thereto, claim 2 of the present application as amended refers to a method of gathering information on the use of a control signal at a receiver station having a plurality of inputs, a processor, and at least one controllable device. The

receiver station transfers the gathered information to a remote station through a process that requires identifying a control signal, performing a search for the identified control signal in an input data stream, passing the control signal derived from the searching step from the processor to at least one controllable device, and communicating information on the passing of the identified control signal from the receiver station to the remote station.

The referenced prior art does not recite the features of claim 2 outlined above. Campbell fails to disclose the identifying of a control signal as outlined above and does not recite performing a search for the identified control signal in an input data stream. Furthermore Campbell does not teach communicating information on the passing of an identified control signal from a receiver station to a remote station. Accordingly, Applicants respectfully submit that claim 2 is not anticipated by Campbell.

Claim 13 refers to a multimedia apparatus for gathering information on the use of a control signal that comprises a plurality of input ports for receiving multimedia signals, an output port, and a processor. The processor is connected to the input ports and is programmed to identify a control signal from at least one input port, passing the identified control signal to the output port, and then communicating information on the passing of the control signal to a remote data collection station.

Campbell does not recite or teach a processor connected to input ports and programmed to identify a control signal nor does it recite the capability to pass an identified control signal to the output port and communicating the information related to the passing, to a remote data collection station, as recited in claim 13 of the present application. Accordingly, Applicants respectfully submit that Campbell does not

anticipate claim 13 of the present application. Applicants also submit that claims 3, 4, and 14-19, are patentable at least by virtue of their dependence on patentable claims 2 and 13.

In paragraph 17 of the Office Action claims 5-12, 20-41 and 43 are rejected under 35 U.S.C. § 103 as being unpatentable over Campbell (U.S.P. 4,536,491). Applicants respectfully disagree with this conclusion and traverse this rejection as follows.

In contrast to Campbell, outlined above, claim 21 of the present application as amended refers to a method of communicating subscriber station information from a subscriber station to at least one remote collection station. This method is characterized by inputting an instruct signal which is effective at the subscriber station to control an apparatus and a code or datum to serve as evidence of the passing of the instruct signal or the functioning of the controllable apparatus in response to the instruct signal. Campbell does not teach or suggest these features and accordingly, Applicants respectfully submit that claim 21 of the present application is patentably distinct and not obvious with respect to the teachings of Campbell.

Claim 25 of the present application as amended refers to a method of signal processing at a receiver station that includes a receiver and a processor. The method is characterized by reception by the receiver of identification signals that identify specific signal content for at least one concurrent broadcast or cablecast transmission, providing a comparison signal to the processor, comparing the comparison signal with the identification signals and generating an identification signal identifying a desired broadcast or cablecast transmission. The method further recites tuning the receiver to receive the desired broadcast or cablecast, inputting at least some of the desired

broadcast or cablecast transmission to the processor and responding to an instruct signal for controlling a receiver station apparatus or code to serve as evidence of the passing of the instruct signal to a controllable device or of the functioning of the apparatus.

Campbell does not teach or suggest the recitations of claim 25 of the present application. Specifically, Campbell does not teach or suggest providing a comparison signal to a processor, nor does it teach tuning a receiver to receive a desired broadcast or cablecast transmission following the generation of an identification signal. Accordingly, in light of the absence of any teaching suggestion or motivation in Campbell of the teachings and recitations of claim 25 of the present invention, Applicants respectfully submit that claim 25 is not obvious in view of Campbell.

Claim 26 as amended refers to a method of controlling a remote intermediate transmitter station. The method is characterized by receiving at least one instruct signal and at least one of a code and datum at at least one origination transmitter, and delivering the instruct signal and the code or datum to at least one origination transmitter where the instruct signal is operative at a receiver station to control at least one controllable apparatus, and said code or datum serves as evidence of the passing of the instruct signal to the controllable apparatus or of the functioning of the apparatus in response to the instruct signal. Campbell does not teach or suggest these features, and accordingly Applicants respectfully submit that claim 26 is not obvious in view of Campbell.

Similarly claim 29 recites features not taught or suggested by Campbell. Specifically, claim 29 as amended refers to a method of processing signals at a receiver station having a computer and a television monitor to deliver at the television monitor at least one of a combined and sequential presentation of a program and a user specific output. The method is characterized in part by storing user data of interest and receiving from a television programming source an information transmission containing television programming. The method further provides for detecting in the information transmission at least one instruct signal that is operative to control a receiver station apparatus and at least one of a code or datum to serve as evidence of the passing of the instruct signal or the functioning of a controllable apparatus. Campbell does not teach or suggest the methodology wherein at least one of a code or datum is used to serve as evidence of the passing of an instruct signal or the functioning of a controllable apparatus. Accordingly Applicants submit that claim 29 is not obvious in view of Campbell.

Claim 31 refers to a method of generating encoding signals to control a presentation. This method comprises in part the steps of receiving and storing a program that contains video information and receiving an instruction and at least one of a code or datum which have the effect at a user station to control receiver station apparatus and to serve as evidence of the passing of the instruction or the functioning of controllable apparatus respectively. Campbell does not teach or suggest receiving and storing a program that contains video information, nor does it teach receiving one of a code and a datum that serve as evidence of the passing of the instruction to a controllable apparatus and of the function performed by at least one controllable

apparatus in response to the instruction. Accordingly Applicants submit that claim 31 is not obvious in view of Campbell.

Claim 36 as amended refers to a method of controlling a network having a plurality of receiver stations, each of which includes a broadcast or cablecast signal receiver, a processor and a signal detector. The method of controlling consists of several steps outlined in the claim. Campbell does not teach receiving at least one broadcast and a cablecast transmitter station, at least one instruct signal to control at least one controllable apparatus, and at least one of a code and a datum to serve as evidence of at least one of a passing of the instruct signal to a controllable apparatus and a functioning of the controllable apparatus in response to the instruct signal. Accordingly, Applicants respectfully submit that claim 36 is not obvious in view of Campbell.

Applicants further submit that the remaining claims in the rejection of paragraph 17 of the Office Action, claims 5-12, 20, 22, 24, 27, 28, 30, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42 and 43 are patentable at least by virtue of their dependence on patentable independent claims.

Claims 2-43 have been rejected under the judicially created doctrine of non-obviousness, non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414. As to the double patenting rejections of paragraphs 9-13, applicants' views are fully discussed in applicants' reply brief to the rejections in application number 08/113,329, and that reply brief is incorporated by reference herein. Moreover, the claims of the present application are patentably distinct

from the representative claims of U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414.

As an initial matter, the examiner's rejection of the present application under the Schneller double patenting theory based on Harvey U.S. Patents 4,694,490 and 4,704,725 is improper because the present application does not claim the benefit of those applications under 35 U.S.C. § 120. Thus, there could never have been a basis for claiming the present subject matter in those applications. Therefore, the rejection based on Harvey U.S. Patents 4,694,490 and 4,704,725 should be withdrawn.

Moreover, the PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter recited." The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between

the two or more subjects disclosed" and that they are not connected. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed . . ." Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

Claim 36 of the present application is distinct from the first representative claim, claim 7 of U.S. Patent 4,694,490.

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display being specific to a particular user.

Claim 36 of the present Application as amended refers to a method of controlling a network that includes a plurality of receiver stations, each of which includes a broadcast or cablecast signal receiver, at least one processor, and a signal detector.

Patent claim 7 does not cover present application claim 36. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. Application claim 36 relates to a method of controlling a plurality of receiver stations. Each receiver station includes a signal processor adapted to receive signals from a broadcast or cablecast signal and programmed to respond to signals from a signal detector that is also part of the receiver station. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,694,490, claim 7	Present application, claim 36 (as amended)
<p>In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct to-overlay signal are transmitted to said receiver stations, the</p>	<p>A method of controlling a network having a plurality of receiver stations each of which includes a broadcast or cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from a broadcast or cablecast signal, said processor programmed to respond to signals from said detector, said method comprising the steps of:</p> <ol style="list-style-type: none"> <li>(1) receiving at at least one of a broadcast and a cablecast transmitter station (i) at least one instruct signal which is effective at said plurality of receiver stations to control at least one controllable apparatus and (ii) at least one of a code and a datum to serve as evidence of at least one of a passing of said at least one instruct signal to at least one controllable apparatus and a functioning of said at least one controllable apparatus in response to</li> </ol>

steps of:  
receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations  
detecting the presence of said instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

said at least one instruct signal;  
(2) transferring said at least one instruct signal and said at least one of said code and said datum to at least one transmitter;  
(3) receiving at least one control signal at said transmitter station, said control signal designating at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and  
(4) transferring said at least one control signals from said at least transmitter, said at least one transmitter at least one of broadcasting and cablecasting said at least one instruct signal, said at least one of said code and said datum, and said at least one control signal to said plurality of receiver stations.

Claim 36 of the present application is distinct from the second representative claim, claim 3 of U.S. Patent 4,704,725.

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal.

Claim 36 of the present Application as amended refers to a method of controlling a network that includes a plurality of receiver stations, each of which includes a broadcast or cablecast signal receiver, at least one processor, and a signal detector.

Patent claim 3 does not cover present application claim 36. Patent claim 3 relates to the communication of user specific signals. Application claim 36 relates to a method of controlling a plurality of receiver stations. Each receiver station includes a signal processor adapted to receive signals from a broadcast or cablecast signal and programmed to respond to signals from a signal detector that is also part of the receiver station. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,704,725, claim 3	Present application, claim 36 (as amended)
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device; detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with	A method of controlling a network having a plurality of receiver stations each of which includes a broadcast or cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from a broadcast or cablecast signal, said processor programmed to respond to signals from said detector, said method comprising the steps of: (1) receiving at least one of a broadcast and a cablecast transmitter station (i) at least one instruct signal which is effective at said plurality of receiver stations to control at least one controllable apparatus and (ii) at least one of a code and a datum to serve as evidence of at least one of a passing of said at least one instruct signal to at least one controllable apparatus and a functioning of said at least one controllable apparatus in response to

said selected stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

said at least one instruct signal;

(2) transferring said at least one instruct signal and said at least one of said code and said datum to at least one transmitter;

(3) receiving at least one control signal at said transmitter station, said control signal designating at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and

(4) transferring said at least one control signals from said at least one transmitter, said at least one transmitter at least one of broadcasting and cablecasting said at least one instruct signal, said at least one of said code and said datum, and said at least one control signal to said plurality of receiver stations.

Claim 40 of the present application is distinct from the third representative claim, claim 24 of U.S. Patent 4,965,825.

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Claim 36 of the present Application as amended refers to a method of controlling a network that includes a plurality of receiver stations, each of which includes a broadcast or cablecast signal receiver, at least one processor, and a signal detector.

Patent claim 24 does not cover present application claim 36. Claim 24 relates to user specific signals sent from the receiver station to an output device. Application claim 36 relates to a method of controlling a plurality of receiver stations. Each receiver station includes a signal processor adapted to receive signals from a broadcast or cablecast signal and programmed to respond to signals from a signal detector that is also part of the receiver station. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

<b>U.S. patent 4,965,825, claim 24</b>	<b>Present application, claim 36 (as amended)</b>
<p>In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output</p>	<p>A method of controlling a network having a plurality of receiver stations each of which includes a broadcast or cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from a broadcast or cablecast signal, said processor programmed to respond to signals from said detector, said method comprising the steps of:</p> <p>(1) receiving at least one of a broadcast and a cablecast transmitter station (i) at least one instruct signal which is effective at said plurality of receiver stations to control at least one controllable apparatus and (ii) at least one of a code and a datum to serve as evidence of at least one of a passing of said at least one instruct signal to at least one controllable</p>

information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

apparatus and a functioning of said at least one controllable apparatus in response to said at least one instruct signal;

(2) transferring said at least one instruct signal and said at least one of said code and said datum to at least one transmitter;

(3) receiving at least one control signal at said transmitter station, said control signal designating at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and

(4) transferring said at least one control signals from said at least transmitter, said at least one transmitter at least one of broadcasting and cablecasting said at least one instruct signal, said at least one of said code and said datum, and said at least one control signal to said plurality of receiver stations.

Claim 40 of the present application is distinct from the fourth representative claim, claim 15 of U.S. Patent 5,109,414

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Claim 36 of the present Application as amended refers to a method of controlling a network that includes a plurality of receiver stations, each of which includes a broadcast or cablecast signal receiver, at least one processor, and a signal detector.

Patent claim 15 does not cover present application claim 36. Patent claim 15 relates to a data system that receives and processes data from a data source and includes a processor that controls the functions of a matrix switch and a storage device. Application claim 36 relates to a method of controlling a plurality of receiver stations. Each receiver station includes a signal processor adapted to receive signals from a broadcast or cablecast signal and programmed to respond to signals from a signal detector that is also part of the receiver station. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 5,109,414, claim 15

In a signal processing system,  
a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means,  
a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,  
a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,  
a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and  
a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on

Present application, claim 36 (Amended)

A method of controlling a network having a plurality of receiver stations each of which includes a broadcast or cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from a broadcast or cablecast signal, said processor programmed to respond to signals from said detector, said method comprising the steps of:

- (1) receiving at least one of a broadcast and a cablecast transmitter station (i) at least one instruct signal which is effective at said plurality of receiver stations to control at least one controllable apparatus and (ii) at least one of a code and a datum to serve as evidence of at least one of a passing of said at least one instruct signal to at least one controllable apparatus and a functioning of said at least one controllable apparatus in response to said at least one instruct signal;
- (2) transferring said at least one instruct signal and said at least one of said code and said datum to at least one transmitter;

instructions contained in said control signals.

(3) receiving at least one control signal at said transmitter station, said control signal designating at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and

(4) transferring said at least one control signals from said at least transmitter, said at least one transmitter at least one of broadcasting and cablecasting said at least one instruct signal, said at least one of said code and said datum, and said at least one control signal to said plurality of receiver stations.

Claims 2-43 are rejected under the judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and other listed U.S. applications. The rejection should rightfully be a provisional rejection until one or more of the copending applications issues, at which time the rejection can be made non-provisional.

Secondly, although the rejection is stated as a judicially created obviousness double patenting rejection, the examiner's arguments are those of a Schneller non-obviousness, non-statutory double patenting rejection. Applicants' reply brief addresses the merits of the Schneller-type rejection.

The examiner's comments on the claims is acknowledged and appreciated. With respect to the assertion, in paragraph 2, that no attempt to will be made to determine the effective filing date of this application, applicant claims priority under 35 U.S.C. § 120 of the following applications:

Serial No.

Filing Date

Patent No.

08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Applicants will address the art rejections of this Office Action, but traverse the assertion that a double patenting situation exists.

As to the paragraph numbered 3, applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming, arguendo, that substantially duplicate claims exist, the applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

As to the paragraph numbered 4, applicants acknowledge and appreciate the examiner's concern over the use of alternative claim language. Applicants assert that they believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, applicants intend to ensure that the disclosure supports each possible embodiment claimed using alternative claims.

In paragraph 11, the Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." Applicants submit that the examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in examiner's first Office Action. 37 CFR § 1.104(a) states that "[o]n taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating

to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.” The MPEP states “[t]he examiner’s action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before action is made.” MPEP § 707.07, citing 37 CFR § 1.105. Finally, “[p]iecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available . . . .” “Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression.” MPEP § 707.07(g). Applicants submit that the examiner has a duty to give each application a complete examination, to make rejections with specificity, and that not to defer rejections. For these reasons, applicants likewise traverse the rejection based on the “judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all applicants copending applications].” Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to the grouping of paragraphs numbered 19, applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. The Office Action states that “the Group would like to have a complete grouping of applications in a manner

that was submitted earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the PTO does not appear to be following the groupings applicants submitted previously. The order of examination of applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the PTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, applicants respectfully submit that their offer was to disclaim a block of copending applications against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

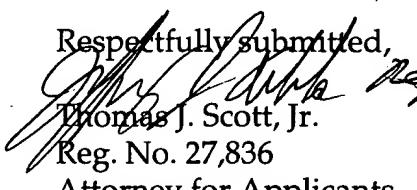
## **CONCLUSION**

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Date: September 24, 1997  
**HOWREY & SIMON**  
1299 Pennsylvania Avenue, NW  
Washington, D.C. 20004  
Tel: (202) 383-6614

Respectfully submitted,

  
Thomas J. Scott, Jr.  
Reg. No. 27,836

Attorney for Applicants

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for